

Interoffice Memorandum

From: Albert Ruiz-Vela

Date: April 8, 1997

To: Dan Even

Subject: **Monthly Report – March 1997
Product Development
& Engineering**cc: Mark Clineff
Glenn Lyon
Mark Vigna
Eckhard Vogel
Don Frei

Craig Andreiko
Kerry Darney
Farrokh Farzin-Nia
Gary Garman
Randy Hacker
Jason Lee
Mark Payne
Tom Selkee
Hamid Sheikh
Raymond Thornton
Ray Wong
Ron Sirney
Eric Chapoulaud

Bob Davis
Dan Dixon
Ted Driefuss
Grace Kibler
Colin Matheson
John Payne
Brian Hulan
Henry Hulan
Steve Paskin
Eric Shirley

Tom McCarthy
Joe Rotino
Mary Warren

**ORMCO CONFIDENTIAL
AND PROPRIETARY
INFORMATION –

DO NOT COPY
OR DISTRIBUTE**

ORMCO CONFIDENTIAL AND PROPRIETARY INFORMATION

9703_rec.doc

ORM053311

HIGHLY CONFIDENTIAL

TABLE OF CONTENTS

ORTHODONTIC PRODUCTS	4
A. NEW PRODUCT DEVELOPMENT ACTIVITIES	4
<u>TYPE I (Built In-House)</u>	
AI-1. <i>Alexander Spirit</i> Brackets	4
AI-2. Self-Ligating Brackets (Dr. Wildman)	4
AI-3. AEZ Instruments	4
a. Flush-Cut Distal-End Cutter	4
AI-4. Textured Molar Bands	5
AI-5. Burstone <i>Orthos</i> Cuspid Brackets with Horizontal Tube	5
AI-6. Molded Mini-Stick <i>Power Os</i>	5
AI-7. Tooth Shaped Pad	6
AI-8. <i>Orthos-AD</i> Alexander Discipline Appliance System	6
AI-9. Mandibular Anterior Repositioning Appliance (Dr. Eckhart)	6
AI-10. Low Cost RPE	7
AI-11. Orthos Carriere Bracket	7
AI-12. <i>Orthos</i> Lip Bumper	7
AI-13. Orthos Weldable Bicuspid	7
<u>TYPE II (Outside Vendor)</u>	
<u>TYPE III (Product Modifications)</u>	
B. RESEARCH AND EXPLORATORY PRODUCT INVESTIGATIONS	8
<u>TYPE I (Built In-House)</u>	
BI-1. <i>Orthos-AD/AP</i> Alexander Discipline Asian Prescription Appliance System	8
BI-2. <i>CustomR_x</i> Custom Labial Appliance System	8
BI-3. <i>CustomR_x</i> Custom Lingual Appliance System	9
BI-4. Adhesive Pre-Coated Brackets	9
BI-5. Moisture-Resistant Adhesive	10
BI-6. Wedge-Shaped Neck Strap (Dr. Alexander)	10
BI-7. <i>Orthos CM_F</i> in <i>Spirit MB</i>	10
BI-8. <i>Orthos</i> Adjustable Placement Gauge	11
BI-9. <i>Orthos AD</i> in <i>Spirit MB</i>	11
BI-10. Ni-Ti Ligaturless Bracket	11
BI-11. Titanium Brackets	11
BI-12. Titanium Bands	12
BI-13. Material Research	12
BI-14. Uni-Bracket Packaging	12
BI-15. <i>Ormco</i> Class II Jumper	13
BI-16. <i>Wildman</i> Lingual Bracket	13
BI-17. Arch Measuring Template	13
BI-18. <i>Takemoto</i> Lingual Appliance	14
BI-19. Single-Piece Bracket	14
BI-20. Titanium Alloy Wire	14
BI-21. Power Chain Dispensing System	14
BI-22. Occlusally Offset Molar Pads	15
BI-23. Improved Power Chain	15
BI-24. Gold Arches	15
BI-25. <i>MARA</i> Three Jaw Plier	16
BI-26. <i>MARA</i> Torque Tool	16

ORMCO CONFIDENTIAL AND PROPRIETARY INFORMATION

TYPE II (Outside Vendor)	16
BII-1. Reverse-Curve <i>Copper Ni-Ti</i> Archwires	16
BII-2. Disinfectant Solution	17
BII-3. Titanium Buccal Tube - MIM Process	17
C. PRODUCT IMPROVEMENT / MANUFACTURING SUPPORT ACTIVITIES	17
C-I. <i>AOA</i> (Laboratory) Engineering Support	17
C-II. CE Marking	18
C-III. Bracket Placement Process Improvement	18
C-IV. Gold Bracket Alternative Vendor	19
C-V. AEZ / ETM Instrument Support	19
C-VI. Improved Optimesh	19
D. OTHER DEPARTMENT ACTIVITIES	20
D-I. Capital Appropriation Requests	20
D-II. Custom Braze	20
ENDODONTIC PRODUCTS	20
A. RESEARCH AND EXPLORATORY PRODUCT INVESTIGATIONS	20
AI-1. Post Remover Kit	20
AI-2. Buchanan Hand Plugger	20

ORMCO CONFIDENTIAL AND PROPRIETARY INFORMATION**ORTHODONTIC PRODUCTS****B. RESEARCH AND EXPLORATORY PRODUCT INVESTIGATIONS****TYPE I (Built In-House)**

BI-2. CustomRx CUSTOM LABIAL APPLIANCE SYSTEM (Project 853-E Craig Andreiko/Eric Chapoulaud)

a. **Lab Reopening** (Craig Andreiko / Eric Chapoulaud)

1) **Accomplishments / Status**

- A Plan describing the activity for this project has been written and submitted for approval. It intends to allow us to produce 5 clinical cases in the next six months using the new 3D JIGS, that will be clinically tested in a closeby office.
- According to this plan, a case of 5x5 for the uppers of the PK Thomas model has been manually designed: Wire and Brackets position and characteristics. A new appliance design software (codename Atlantis) was created allowing the tooth long axis definition and Wire design.

2) **Goals For April**

- Design of the 3D JIG tooth registration surface component.
- Design of the 3D JIG bracket attachment component.
- Manufacturing of the 3D JIGS for the 5x5 uppers of the PK Thomas Model.
- Implementation of the corresponding software.

3) **Major Project Milestones**

- 3D JIG Design review: 5/15/97

b. **3D Digitizing** (Eric Chapoulaud)

1) **Accomplishments / Status**

- No development were implemented this month.

2) **Goals For April**

- No new development anticipated this month.

3) **Major Project Milestones**

- Mandibular jaw of the PK Thomas model scanned: 5/18/97.

BI-3. CustomRx CUSTOM LINGUAL APPLIANCE SYSTEM (Project 953-E; Craig Andreiko)

a. **Accomplishments / Status**

- No development were implemented this month.

b. **Goals For April**

- No new development anticipated this month.

c. **Major Project Milestone**

- Re-evaluate project once 3D scanning & jig fabrication is completed.